ACGC Course Director Biosketch Format (*Approved by BOD: April, 2020*)

COURSE DIRECTOR/FACULTY TEACHING BIOGRAPHICAL SKETCH

Follow this format for all faculty course directors (For courses directed by program leadership use the Program Directors/Co-Directors or other Program Leadership form) .

DO NOT EXCEED FOUR PAGES

NAME: Ferrin C. Wheeler, PhD, FACMG

INSTITUTION POSITION TITLE: Associate Professor

GRADUATE PROGRAM POSITION TITLE: Course director

EDUCATION/TRAINING *(Begin with baccalaureate or other initial professional education, such as nursing, include postdoctoral training and residency training if applicable. Add/delete rows as necessary.)*

INSTITUTION AND LOCATION	DEGREE *(if applicable)*	Completion Date MM/YYYY	FIELD OF STUDY
Purdue University, West Lafayette, Indiana,	BS	05/1996	Genetic Biology
Washington University in St. Louis, St. Louis, Missouri	PhD	06/2002	Molecular Genetics
University of North Carolina, Chapel Hill, North Carolina	(fellowship)	07/2011	Clinical Cytogenetics and Clinical Molecular Genetics

A. Course Title(s): Laboratory Science in Genetic Counseling

B. Please provide a brief statement of expertise and/or skill set that you offer for students taking the course(s) you are responsible for teaching. *In addition, please include a description of your knowledge and content expertise related to genetic counselor specific education. Please describe training or experiences which have supported the development of your teaching skills. Please describe any future plan for obtaining training to support the ongoing development of teaching skills*) **(Standard A2.5.2):**

I am a clinical laboratory director with expertise in molecular genetics and genomics and cytogenetics. I have extensive experience with teaching students and trainees in laboratory diagnostics in both the classroom and lab setting over the past 11 years. I work with clinical providers and genetic counselors on a regular basis and have been teaching in the genetic counseling program for the past several years. Prior to starting as a lecturer and course director, I was able to attend several workshops through the VU Center for Teaching and Faculty Development workshops with MGC/VUMC/Dept of Pediatrics. I hope to take part in any additional offered workshops or faculty development programs to provide continuous improvement in my teaching skills.

C. Positions, certification, and honors *(include dates)***:**

I. Positions and employment:

Associate Professor, Vanderbilt University Medical Center, Department of Pathology, Microbiology and Immunology, October 1, 2021-present

Assistant Professor, Vanderbilt University Medical Center, Department of Pathology, Microbiology and Immunology, August 1, 2011-September 30, 2021

II. Certification (please include specific field)

American Board of Medical Genetics

Clinical Cytogenetics (Certificate #: 2011194; original 2011, renewed in 2021)

Clinical Molecular Genetics (Certificate #: 2011195, original 2011, renewed in 2021)

III. Honors:

D. Please list your Teaching/Mentorship/Clinical Supervision/Leadership Activities. *(within the last 5 years)*:

Course Director and lecturer, Vanderbilt University Masters of Genetic Counseling program, Laboratory Science in Medical Genetics (GC6520), Spring 2020-present

Lecturer, Vanderbilt University Masters of Genetic Counseling program, Foundations in Genetics and Genomics (GC6500, formerly Medical Genetics I; CG6510), Fall 2019-present

Fellowship Director, Cytogenetics Laboratory, Vanderbilt University Medical Center Laboratory Genetics and Genomics Fellowship, July 2018-present

Course co-director, Vanderbilt University BRET course: Clinical Laboratory Medicine – Applying Your PhD to Patient Care, Fall 2016-present

Lecturer, Vanderbilt University Medical Center, Medical Technologist Training Program, Fall 2011-present

Instructor, Vanderbilt University Medical Center, Clinical rotations in Cytogenetics and Molecular Diagnostics, residents and fellows, Fall 2011-present

E. Professional Activities *(Within the last 5 years):*

Editorial Board Member, Cytogenetic and Genome Research. July 2016-present

Ad hoc reviewer, Genetics in Medicine, 2016-present

Ad hoc reviewer, Cancer Genetics, 2019-present

Conference Coordinator, Pediatric Genetics Department Interesting Labs Conference, June 2021-present

Lead Inspector and Specialty Inspector, College of American Pathologists

Laboratory Rotation Coordinator, Vanderbilt University MGC program, November 2021-June 2022

Medical Director of Vanderbilt Cytogenetics Laboratory, August 2011-present

Associate Director of Vanderbilt Molecular Diagnostics Laboratory, August 2011-present

Attending pathologist, Vanderbilt Genomics Laboratory, March 2020-present

F. Research, funded grants and/or scholastic endeavors including accepted abstracts and other publications: *(Please only include accomplishments from the last 5 years):*

Selected publications:

Clinical diagnosis of Neurofibromatosis Type I in multiple family members due to co-segregation of a unique balanced translocation with disruption of the NF1 locus: Testing considerations for accurate diagnosis. Smith RB, Solem EP, Metz EC, Wheeler FC, Phillips JA, Yenamandra A. American Journal of Medical Genetics. Part A. 2021;1–6. https://doi.org/10.1002/ajmg.a.62071A (2021)

Acquisition of aneuploidy drives mutant p53-associated gain-of-function phenotypes. Redman-Rivera LN, Shaver TM, Hailing Jin H, Schafer JM Sheng Q, Rachel Hongo R, Beckermann KE,Brian D. Lehmann BD, Wheeler FC, and Pietenpol JA. Nature Comminications, Nat Commun. Aug 31;12(1):5184. doi: 10.1038/s41467-021-25359-z. (2021)

Selected accepted abstracts:

Wheeler FC and Hong-McAtee I. Clinical and diagnostic findings in a child with an unbalanced t(X;13) resulting in Turner syndrome and trisomy 13. Poster presentation at the Cancer Genomics Consortium conference, August 2020 (Virtual).

Wheeler FC and Brady C. Clinical and cytogenetic findings in a phenotypic female with a 46,XY karyotype and complete gonadal failure, American College of Medical Genetics and Genomics Annual Clinical Genetics Meeting, Poster presentation at the American College of Medical Genetics and Genomics Annual Clinical Genetics Meeting, April 2021 (Virtual).

Wheeler FC, Mosera M, Solem E, Phillips JA, Phillips, J Lee L Porath B, Stricker TS. Exome sequencing unravels dual diagnoses and complex molecular etiologies in a family with prior negative diagnostic testing. American College of Medical Genetics and Genomics Annual Clinical Genetics Meeting, Poster presentation at the American College of Medical Genetics and Genomics Annual Clinical Genetics Meeting, March 2022 (Nashville, TN)